### IMAGES IN EMERGENCY MEDICINE

Obstetrics and Gynecology



# Abdominal pain in an adolescent female

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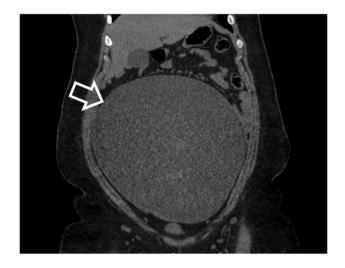


FIGURE 1 Computed tomography abdomen/pelvis coronal view with  $28.5 \times 29.7 \times 17.8$  cm cystic mass (white arrow) arising from the pelvis and extending into the abdomen

#### 1 | CASE PRESENTATION

A 16-year-old female presented to the emergency department with lower abdominal pain associated with nausea and vomiting. Physical examination revealed moderate distress due to pain, lower left quadrant abdominal tenderness without rebound or guarding. Complete blood count (CBC), comprehensive metabolic panel, and urinalysis were within normal limits. Urine human chorionic gonadotropin negative. Computed tomography (Figures 1 and 2) and ultrasound (Figure 3) images showed the following.

#### **DIAGNOSIS**

#### 2.1 | Cystadenoma of the left ovary

Cystadenomas are the most common benign ovarian neoplasms in reproductive-age patients.<sup>1,2</sup> Most cysts in adolescents are

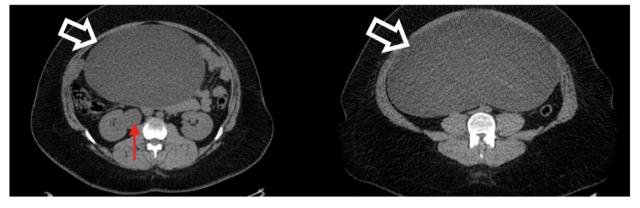
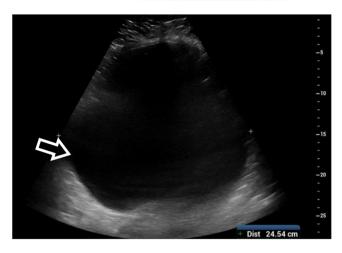


FIGURE 2 Computed tomography abdomen/pelvis axial views. Left image red arrow pointing to right ureter with mild-to-moderate right hydroureteronephrosis due to postrenal obstruction caused by cystic mass (white arrows in left and right axial planes) arising from the pelvis and extending into the abdomen

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**FIGURE 3** Transabdominal ultrasound with Duplex shows large cystic mass (white arrow) in the abdomen/pelvis, likely adnexal origin. Right ovary demonstrated venous flow but no definitive arterial flow. The right ovary did not appear enlarged or edematous to suggest torsion. Left ovary was not visualized

asymptomatic. As these masses grow, they can cause pain, urinary symptoms, or even ovarian torsion.<sup>3</sup> They typically vary in size

from 5 cm up to 20 cm; however, this patient had a much larger cystadenoma. During the ED course, the patient was evaluated by obstetrics/gynecology consultants before an exploratory laparotomy. In the operating room, Poole suction was placed into the mass and 6 L of fluid was removed. She underwent left ovarian cystectomy and required left salpingo-oophorectomy. Pathology confirmed a serous cystadenoma. The patient was discharged home 2 days later without complications.

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